



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

MAY 07 2004

Colonel Michael J. Conrad, Jr.  
District Engineer  
U.S. Army Corps of Engineers  
Sacramento District  
1325 J Street, 14<sup>th</sup> floor  
Sacramento, California 95814-2922

re: Public Notice #199500412; River Islands at Lathrop; San Joaquin County, CA

Dear Colonel Conrad:


We have reviewed the Public Notice (PN) dated 9 April 2004 for the proposed River Islands project near Lathrop, California. The applicant, Califia, LLC, proposes to construct ~11,000 homes and five million square feet of commercial space and related infrastructure (e.g., levees, 921 boat docks, nine residential marinas, four bridges, ramps, piers, golf courses, a man-made lake system, schools, parks, and open space) on 4,905 acres of land in the South Delta region. The site is surrounded by segments of the San Joaquin River, Old River, and Paradise Cut. The proposed project would directly affect 31.60 acres of waters of the United States (waters); secondary and cumulative impacts to aquatic resources were not quantified but are potentially significant.

We prepared the following comments under the authority of, and in accordance with, the provisions of the Federal Guidelines (Guidelines) promulgated under Section 404(b)(1) of the Clean Water Act (CWA) at 40 CFR 230. Based upon our review of the available information, we have determined the proposed project is a candidate for elevation pursuant to the 1992 Memorandum of Agreement (MOA) between the Environmental Protection Agency (EPA) and the Department of the Army per CWA§404(q).

We respectfully object to the issuance of a permit for the proposed project on the basis that authorization **may result** in substantial and unacceptable impacts to aquatic resources of national importance (ARNIs). Also, we urge the Corps to require the applicant to prepare an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) to address large-scale direct, secondary, and cumulative impacts.

We look forward to working with your staff and the applicant to resolve the important environmental issues surrounding the proposed project. If you wish to discuss this matter further, please call me at (415) 972-3572, or have your staff contact Tim Vendlinski, Supervisor of our Wetlands Regulatory Office, at (415) 972-3464.

Sincerely,

  
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Director  
Water Division

cc:

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**Detailed EPA Comments**  
**PN #199500412 for the proposed River Islands at Lathrop**

**I. Project Description**

The applicant has proposed a residential and commercial development within the City of Lathrop in the San Joaquin Valley. The project is called River Islands at Lathrop (River Islands) and would be built on a 4,905-acre river island surrounded by the three major waterways associated with the South Delta: the San Joaquin River, Old River, and Paradise Cut.

The project involves the construction of ~11,000 homes, five million square feet of commercial and retail space, 921 boat docks, nine residential marinas, four bridges, ramps, piers, golf courses, a man-made lake system, schools, parks, and open space. Two of the proposed bridges would span the San Joaquin River, while the other two would span Paradise Cut. To remove the project area from the 100-year floodplain, the applicant has proposed the construction and re-construction of new and existing levees, respectively, and the excavation and expansion of the Paradise Cut channel.

The Corps has verified the occurrence of 379 acres of jurisdictional waters within a 5,546-acre study area surveyed for the project. The applicant has estimated the project would cause a direct loss of 31.60 acres of waters, including wetlands. Also, the Corps has stated the project will indirectly impact many acres of aquatic resources in the surveyed area, but indirect impacts have not been quantified.

**II. Clarification of Impacts to Waters of the United States**

The PN did not sufficiently explain how impacts to waters were determined. Although the PN disclosed 31.60 acres of permanent impacts, and up to 379 acres of temporary impacts within the project area, the methodology distinguishing between permanent and temporary impacts is not clear. Also, it is difficult to discern the extent of impacts from each activity. The applicant should more fully disclose the potential impacts by quantifying on a table the estimated acreage of impacts related to each activity, and illustrating these areas of impact on digitized aerial photographs with color-coded overlays.

**III. Importance of the Bay-Delta<sup>1</sup> - Aquatic Resources of National Importance**

Aquatic resources of the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta) have been adversely affected by anthropogenic activities since the Gold Rush. Stressors include water diversions; discharges of pollutants from urban, suburban, and agricultural areas; the modification of habitats and waterways, and the introduction and spread of non-native, invasive

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<sup>1</sup> [http://calwater.ca.gov/CBDA/adobe\\_pdf/CBDA\\_Background.pdf](http://calwater.ca.gov/CBDA/adobe_pdf/CBDA_Background.pdf)

species. Still, the aquatic ecosystem shelters ~750 plant and animal species (some federally listed), provides drinking water for 22 million people, and supports California's trillion dollar economy -- including a \$27 billion agricultural industry.

#### **IV. Scope of Analysis**

Given the scope and scale of the proposed development, and the resulting adverse effects on aquatic and other environmental resources within Corps jurisdiction, the impacts of the proposed project seem clearly significant under NEPA's threshold of "significance" test (40 CFR 1508.27). When considering both the context and intensity of the action, it appears an Environmental Impact Statement (EIS) would be the appropriate tool for analyzing and disclosing impacts of the proposed project under NEPA (40 CFR 1502.3). In addition, it appears that the proposed discharges subject to the Corps' jurisdiction warrant "federalizing" the entire project pursuant to the Corps' NEPA regulations (33 CFR 325, Appendix B). In view of these regulations, it seems the Corps has "sufficient control and responsibility" beyond just regulating the direct discharges of dredged and fill material into jurisdictional waters to encompass within the federal "scope of analysis" the array of multi-media ecosystem associated with the entire project (33 CFR 325, Appendix B).

#### **V. Compliance with Federal Guidelines under CWA Section 404(b)(1)**

The purpose of the Federal Guidelines (Guidelines) is to restore and maintain the chemical, physical, and biological integrity of waters of the United States through the control of discharges of dredged or fill material (40 CFR 230.1(a)). Fundamental to these Guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern (40 CFR 230.1(b)). To comply with the Guidelines, the applicant must clearly demonstrate that the "preferred" alternative is the Least Environmentally Damaging Practicable Alternative (LEDPA) that achieves the basic project purpose. As currently proposed, we cannot determine whether or not the applicant's preferred alternative represents the LEDPA.

#### **Analyses of Alternatives -- 40 CFR 230.10(a)**

The PN states that "the applicant is in the process of identifying alternatives to comply with Section 404(b)(1) of the Clean Water Act", and that the applicant has not provided sufficient information to the Corps to make a LEDPA determination. As the construction of residential housing is not water-dependent, it is presumed that alternatives exist in upland areas that would not require the discharge of dredged and fill material into jurisdictional waters.

In the document prepared pursuant to California Environmental Quality Act (CEQA), three alternatives were identified, but these alternatives do not comply with the requirements of the Guidelines because the range of alternatives was unnecessarily constrained. For example, one

objective of the proposed project is to incorporate water features into the overall development. However, this restricts the range of alternatives for the project to sites with aquatic resources that could accommodate these water features. Off-site locations were determined not to be feasible due to this criterion, and the applicant has not thoroughly explored off-site alternatives that could reduce the potential adverse impacts of the proposed project.

Additional alternatives that meet the basic project purpose both on- and off-site should be explored so the regulatory agencies can make informed decisions about the LEDPA. Properties not presently owned by the applicant which could reasonable be obtained, utilized, expanded, or managed must be considered. Alternatives to be explored include developments located in upland areas, as well as smaller scale facilities. Although these alternatives may achieve a smaller return on investment than the applicant's preferred alternative, they may be considered practicable for the purposes of permitting under CWA§404.

To properly assess and evaluate any analysis of practicable alternatives under the Guidelines, the project purpose must not be defined too broadly (*e.g.*, "to realize a profit") because the resulting range of alternatives would be too large and unwieldy. However, a project must not be defined too narrowly (*e.g.*, "luxury waterfront housing at location X") because the resulting range of alternatives would be too small and opportunities to consider less damaging alternatives might be precluded. Section 230.10(a)(2) states that "an alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." The term "overall project purposes" is not defined, but the underlying principles of the Guidelines serve to illustrate its meaning. Any interpretation of overall project purposes must not conflict with the rest of the Guidelines. Accordingly, the overall project purpose is the basic purpose plus the cost, technical, and logistical factors associated with that basic purpose. The preamble to the Guidelines explains the following:

(W)e emphasize that the only alternatives which must be considered are **practicable** alternatives (emphasis in original). What is practicable depends on cost, technical and logistic factors ... We consider it implicit that, to be practicable, an alternative must be capable of achieving the basic purpose of the proposed activity (45 Fed. Reg. 85339).

The Guidelines at 40 CFR 230.10(a)(2) further explain that practicable alternatives may include "areas not presently owned by the applicant which could reasonably be obtained, utilized, expanded or managed in order to fulfill the **basic purpose** of the proposed activity" (emphasis added). In calling for an assessment of the overall cost/scope of the project, the Guidelines want the agencies to consider whether the basic purpose of the applicant is reasonably achieved by the potential alternatives (as a matter of cost, logistics, and technology).

The Corps and EPA have agreed on this view of "basic" and "overall" project purposes. The Corps' Hartz Mountain 404(q) Findings dated 25 July 1989 stated:

“A prerequisite to evaluating practicable alternatives is the establishment of the ‘basic purpose’ of the proposed activity. It is the responsibility of the Corps districts to control this ... While the Corps should consider the applicant’s views and information regarding the project purpose ... this must be undertaken without undue deference to the applicant’s wishes ... The Guidelines analysis must use the basic project purpose, which cannot be defined narrowly by the applicant to preclude the existence of practicable alternatives.”

As master-planned communities encompass varied land uses (*e.g.*, golf courses, shopping centers, housing), any of which when taken alone comprise potentially viable projects, it is difficult to determine what the basic project purpose is when these uses are bundled together as “one project.” Allowing consideration of additional amenities not essential to achieving the basic project purpose improperly limits the range of alternatives and is contrary to a basic goal of the Guidelines -- to prevent avoidable or unnecessary discharges of fill into waters.

Our interpretation has been that master-planned communities are constructed to serve the demand for housing as local populations experience growth. Therefore, we believe that the appropriate overall project purpose is to construct a **residential development**. Following this purpose, in determining the LEDPA, the Corps should determine what discharges of dredged or fill material are necessary for the applicant to proceed with a practicable residential development. This project purpose would allow the Corps to consider additional features that are essential elements of a residential development (*e.g.*, roads, sewer lines, electrical utilities), and an alternatives analysis should help the Corps determine the need for particular features, and the least environmentally damaging means of incorporating these features into the project footprint.

The Department of the Army (Department) addressed this specific issue in its decision on the 404(q) permit elevation concerning Plantation Landing Resort, Inc., dated 21 April 1989. In that proceeding, the applicant proposed constructing “a fully-integrated...contiguous water-oriented recreational complex” (Plantation Landing Resort, Inc.; paragraph 9). The Department determined the District showed undue deference to the applicant in accepting how the applicant characterized the project purpose:

[w]hen an applicant proposes to build a development consisting of various component parts, and proposes that all those component parts be located on one contiguous tract of land (including waters of the United States), a question of fact arises: i.e., whether all of the component parts, or some combination of them, or none, really must be built, or must be built in one contiguous block, for the project to be viable. The applicant's views on that question of fact should be considered by the Corps, but the Corps must determine (and appropriately document its determination) whether in fact some component parts of the project (*e.g.*, those proposed to be built in waters of the United States) could be dropped from the development altogether, or reconfigured or reduced in scope, to minimize or avoid adverse impacts to waters of the United States. (Plantation Landing Resort, Inc.; paragraph 12).

The documentation prepared by the applicant for River Islands does not meet the burden of proof required to rebut the presumption made by the Guidelines about the availability of a less environmentally damaging practicable alternative. Residential projects do not require “access or proximity to or siting within special aquatic sites to fulfill the basic project purpose” [40 CFR 230.10(a)(3)]. As proposed, the applicant has not rebutted the presumption of the availability of less-damaging alternatives. Although the failure of an applicant to prepare an alternatives analysis is sufficient grounds to justify denial of the application for a Department of the Army permit [40 CFR 230.10(a), 40 CFR 230.12(a)(3)(i), 33 CFR 323.6(a)], the proposed project suffers from several other substantive and procedural deficiencies, discussed below.

### **Water Quality – 40 CFR 230.10(b)**

The proposed project threatens the quality of waters found in and around the site. Short-term and easily foreseeable threats include those associated with potential erosion and increased turbidity related to construction-related activities stretching over the projected 20-year span for the multi-phased development. Long-term and permanent threats include externalities associated with increased boating activities; increased pollutant discharges into Delta waters from wastewater, contaminated run-off, and stormwater; and degraded conditions in the water column involving parameters such as dissolved oxygen and salinity. We understand the City of Lathrop may already have problems properly managing the discharge of wastewater into the South Delta, and it is unclear whether the proposed project will exacerbate or help resolve these problems.

The State Water Resource Control Board has raised concerns about low levels of dissolved oxygen in the Old River and San Joaquin River waterways, and a TMDL is currently being developed for the San Joaquin River to address this problem. Also, we are aware of interagency concerns surrounding impairments related to salinity in the South Delta, and the burden of proof should be placed on the applicant to prove that the proposed development will not worsen the regional salinity problems.

The proposed residential marinas along the waterways and the increased number of power boats also pose a threat to water quality. Specifically, the construction, operation, and maintenance of the residential marinas and the perpetual operation of power boats may result in the release of pathogens, metals, fuels, and other hazardous chemicals and contribute to the significant degradation of receiving waters. It is conceivable that the marinas will alter flows and negatively affect biochemical oxygen demand and dissolved oxygen levels. Additionally, the loading of petrochemicals into this portion of the South Delta corresponds with an ecologically critical location where salmon enter and leave the San Joaquin River; these petrochemicals might form a “chemical blockade” that disrupts the migration of these anadromous fishes. While the Corps decides whether to permit the proposed marina facilities as part of the proposed project, we urge you to analyze the potential adverse effects of the vessels using the proposed facilities consistent with the findings in Fox Bay Partners v. United States Corps of Engineers, 831 F.Supp 605 (N.D. IL 1993).

The proposed man-made lake system is also a cause for concern. The lake system is being designed to detain stormwater, and BMPs have been proposed for stormwater discharges<sup>2</sup>, but it appears the BMPs will not be adequate to address all the adverse effects of increased stormwater flows<sup>3</sup>. The lake system might not be able to sufficiently sequester pollutants generated by the proposed development, and might represent an additional source of pollutants for the receiving waters surrounding the island. The anticipated lack of circulation in the lake system might also encourage the growth of non-native, invasive, and harmful plant species such as Egeria and water hyacinth<sup>4</sup>. Water hyacinth displaces native plant species, reduces food-web productivity, and interferes with water conveyance and flood control systems.<sup>5</sup> Lower dissolved oxygen levels have been documented under water hyacinth canopies, and these conditions might be exacerbated. Finally, with regard to the proposed lake system, the applicant should explore the potential adverse effects on the downstream aquatic system from the proposed diversion of water from the San Joaquin River to supply water to the lake system during the summer months. These diversions would occur at a time when water quality on the San Joaquin River is particularly impaired by low flows, high temperatures, low dissolved oxygen, and high salinity.

### **Endangered Species – 40 CFR 230.10(b)**

The regulations prohibit discharges of dredged or fill material that jeopardize the existence of species federally-listed under the Endangered Species Act. The proposed development could adversely affect several federally-listed species including: delta smelt, steelhead, spring run chinook salmon, winter run chinook salmon, giant garter snake, valley elderberry beetle, and riparian brush rabbit. Additionally, the project could adversely affect Essential Fish Habitat (EFH) as defined in the Magnuson-Stevens Fishery Conservation and Management Act.

With regard to special-status aquatic species, individuals or populations could be placed at additional risk by the periodic maintenance dredging required for the residential marinas, and by entrainment processes related to the operation of diversion pumps for the man-made lake system. Additionally, the marinas could alter the aquatic habitat in the area in a manner that favors predatory fishes that could prey on salmon and steelhead populations.

With regard to the riparian brush rabbit, the species is extremely rare and is restricted to remnant riparian habitats -- most notably along the Stanislaus River in Caswell State Park, and the chosen development site for the proposed River Islands project. It appears the project is inconsistent with the goals of the San Joaquin Multiple-Species Conservation Plan (SJMSCP) which prohibits conversion of occupied riparian brush rabbit habitat, and the take of individual rabbits,

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<sup>2</sup> The applicant has proposed constructed wetlands and grassy swales for BMPs.

<sup>3</sup> River Islands SEIR, 4.8-35

<sup>4</sup> <http://www.dbw.ca.gov/PDF/WHSciProbsExcerpts.pdf> & <http://www.anstaskforce.gov/>

<sup>5</sup> CALFED, Vol. 1 p. 462



until the regulatory agencies determine the range of the species has substantially expanded, and the population has increased to sufficient numbers to allow incidental take<sup>6</sup>. It appears this determination has not been made. Furthermore, we are concerned the proposed mitigation measures for the rabbit (e.g., the construction of fences to prevent predation by domestic animals) are not sufficient to protect this species.

#### **Significant Degradation – 40 CFR 230.10(c)**

The regulations prohibit discharges that would cause or contribute to significant degradation of the aquatic ecosystem (40 CFR 230.10(c)(3)). As proposed, the River Islands project has the potential to do both. The project would result in the loss of waters and wetlands directly and indirectly. Development in the South Delta region and the San Joaquin Valley as a whole has already resulted in the widespread degradation of watersheds in a manner that prevents progress toward achieving the goals of the Clean Water Act -- protecting the physical, chemical, and biological integrity of the Nation's waters.

The proposed project would significantly degrade aquatic ecosystems by introducing large-scale suburban development into the South Delta that will cause adverse and irreversible effects on ecosystem processes and water quality, and foreclose opportunities to restore aquatic environments in the South Delta and beyond. The temporary and permanent impacts related to the significant degradation of the aquatic ecosystem are detailed above and can be summarized broadly as: (1) decreased water quality related erosion, turbidity, diversions, and discharges of wastewater, contaminated run-off, and stormwater from construction activities, suburban activities, maintenance dredging, and other O & M exercises; and (2) decreased habitat functions supporting fish<sup>7</sup> and wildlife resources via the direct and indirect alteration of aquatic and terrestrial habitats, the fragmentation of connected landscapes and watersheds, and the disruption of routes for the migration and dispersal of fish and wildlife populations.

#### **Mitigation – 40 CFR 230.10(d)**

Compensatory mitigation is intended only for unavoidable impacts to waters after the LEDPA has been determined. Therefore, it would be premature to examine in detail any mitigation proposal before compliance with 40 CFR 230.10(a) is established. The applicant has not yet completed a mitigation plan consistent with federal mitigation policies for jurisdictional waters. The applicant has preliminarily proposed mitigation to occur on-site through the creation of habitat within the residential marinas and through the enlargement of the Paradise Cut channel. Such a mitigation proposal appears insufficient and indefensible over the long-term.

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<sup>6</sup> San Joaquin Multiple Species Conservation Plan, Section 5.2.4.23, 5.5.2.7

<sup>7</sup> River Islands Draft SEIR 4.11.16

**Insufficient Information – 40 CFR 230.12(a)(3)(iv)**

The regulations require the District Engineer to make a finding of non-compliance if there is not sufficient information to determine whether a proposed discharge complies with the substantive requirements in the regulations related to alternatives analysis, water quality, endangered species, significant degradation, and/or mitigation. The applicant has not: (1) analyzed alternatives with an acceptable methodology; (2) fully evaluated adverse effects on water quality; (3) considered adverse effects on Bay/Delta habitats and federally-listed species; and (4) formulated an appropriate mitigation plan. Given the available information, it appears the proposed project does not comply with the restrictions to discharges under the Guidelines, and we respectfully urge the Sacramento Corps District to deny the permit.